

ECAT Physics Chapter 19 Dawn of Modern Physics Online Test

Sr	Questions	Answers Choice
1	When a platinum wire is heated, it appears white at	A. 1600 °C B. 900 °C C. 1100 °C D. 1300 °C
2	When platinum wire is heated, it appears cherry red at	A. 1600 °C B. 900 °C C. 1100 °C D. 1300 °C
3	When a platinum wire is heated, it appears yellow at	A. 1600°C B. 900°C C. 1100°C D. 1300°C
4	When a platinum wire is heated, it appears orange red at	A. 500 °C B. 900 °C C. 1100 °C D. 1300 °C
5	When a platinum wire is heated, it appears dull red at about	A. 500°C B. 900°C C. 1100°C D. 1300°C
6	A high temperature, the proportion of shorter wavelengths radiation, emitted by the body	A. decreases B. first increases then decreases C. increases D. any one of them
7	At the temperature, a body emits radiation which is principally	A. of long wavelengths in the visible region B. of long wavelengths in the invisible infrared region C. of short wavelength in invisible ultraviolet region D. none of these
8	According to the special theory of relativity, a moving clock	A. runs faster B. runs slower C. neither runs faster nor slower D. all of these
9	Newton's law of motion do not hold in	A. an accelerated frame of reference B. an unaccelerated frame of reference C. both of these D. none of these
10	The location and speed anywhere on earth can now be determined using relativistic effects	A. 2 cm/s B. 20 cm/s C. 200 cm/s

by NAVISIAR to an accuracy of

C. 200 cm/s
D. 2000 cm/s

11 According to the special theory of relativity

- A. mass and energy are same entities
B. mass and energy are same entities but interconvertible
C. mass and energy are different entities but interconvertible
D. mass and energy are different entities but non-interconvertible

12 The mass of an object will be doubled at speed

- A. 1.6×10^8 ms⁻¹
B. 2.6×10^8 ms⁻¹
C. 2.6×10^7 ms⁻¹
D. 2.6×10^9 ms⁻¹

13 The mass 'm' of a body moving at 0.8 c (whose rest mass is m₀) becomes

- A. 2 m₀
B. 1.67 m₀
C. 0.67 m₀
D. 2.67 m₀

14 The Einstein's changes in length, mass and time are not observed in common life because

- A. We don't observe them seriously
B. The masses are too large
C. Their speed is too small than the speed of light
D. All of the above

15 If a body reaches a speed equal to the speed of light, then its mass will become

- A. zero
B. very small
C. infinity
D. none of these